

FIG. 1

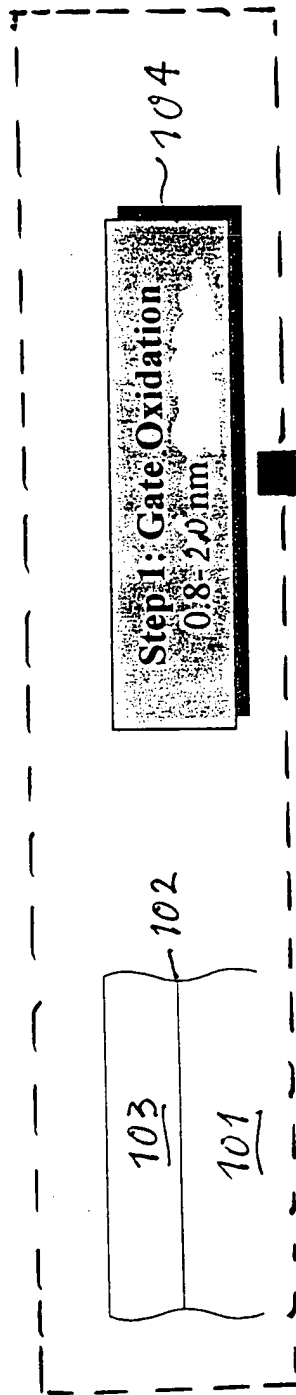


FIG. 2

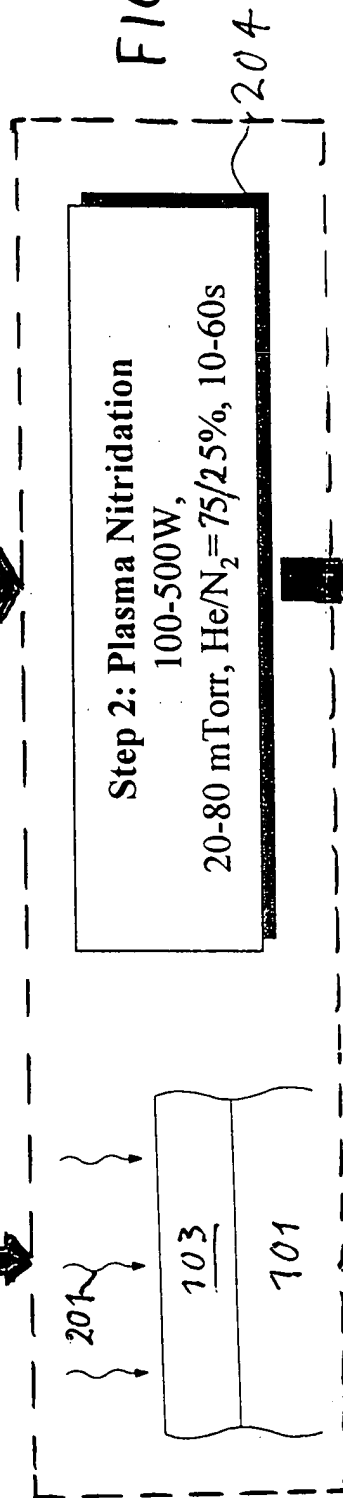
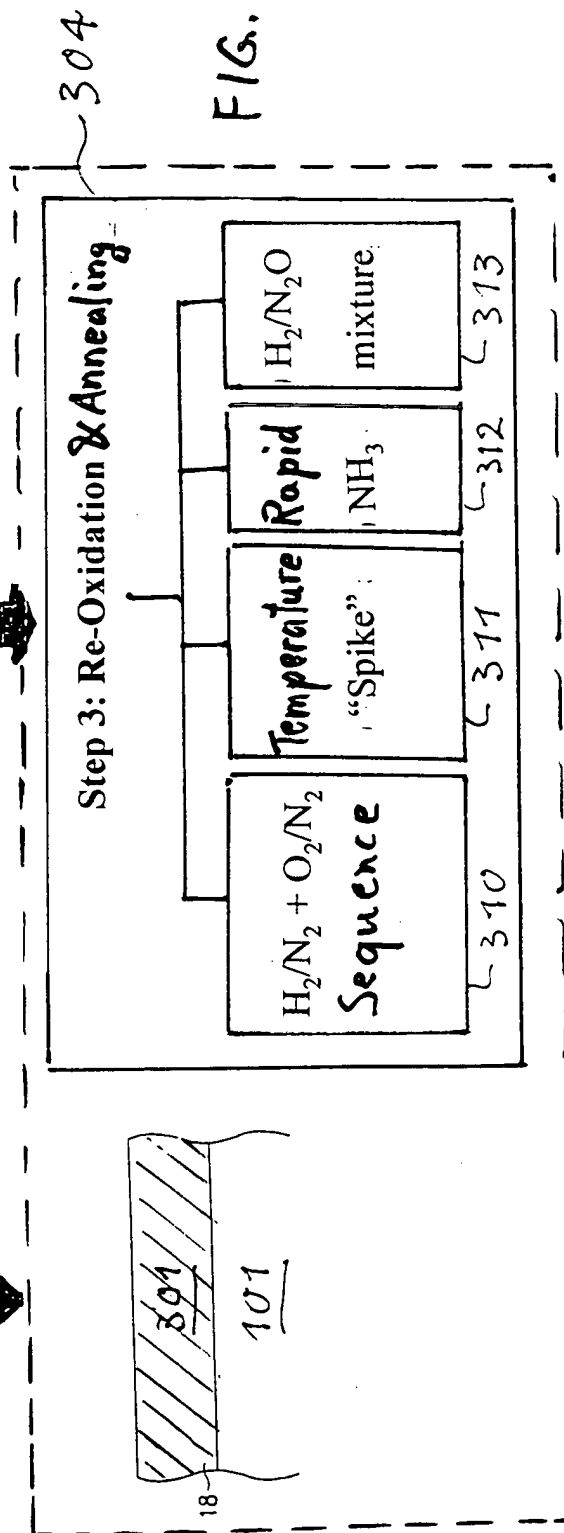


FIG. 3



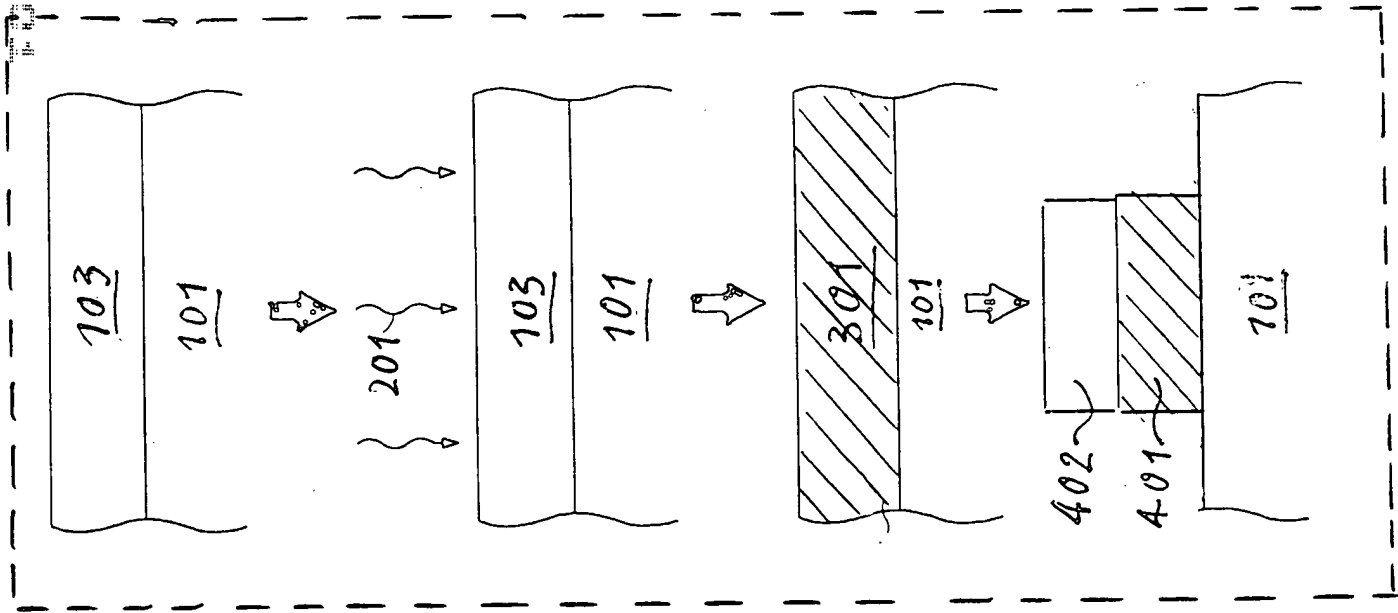


FIG. 4

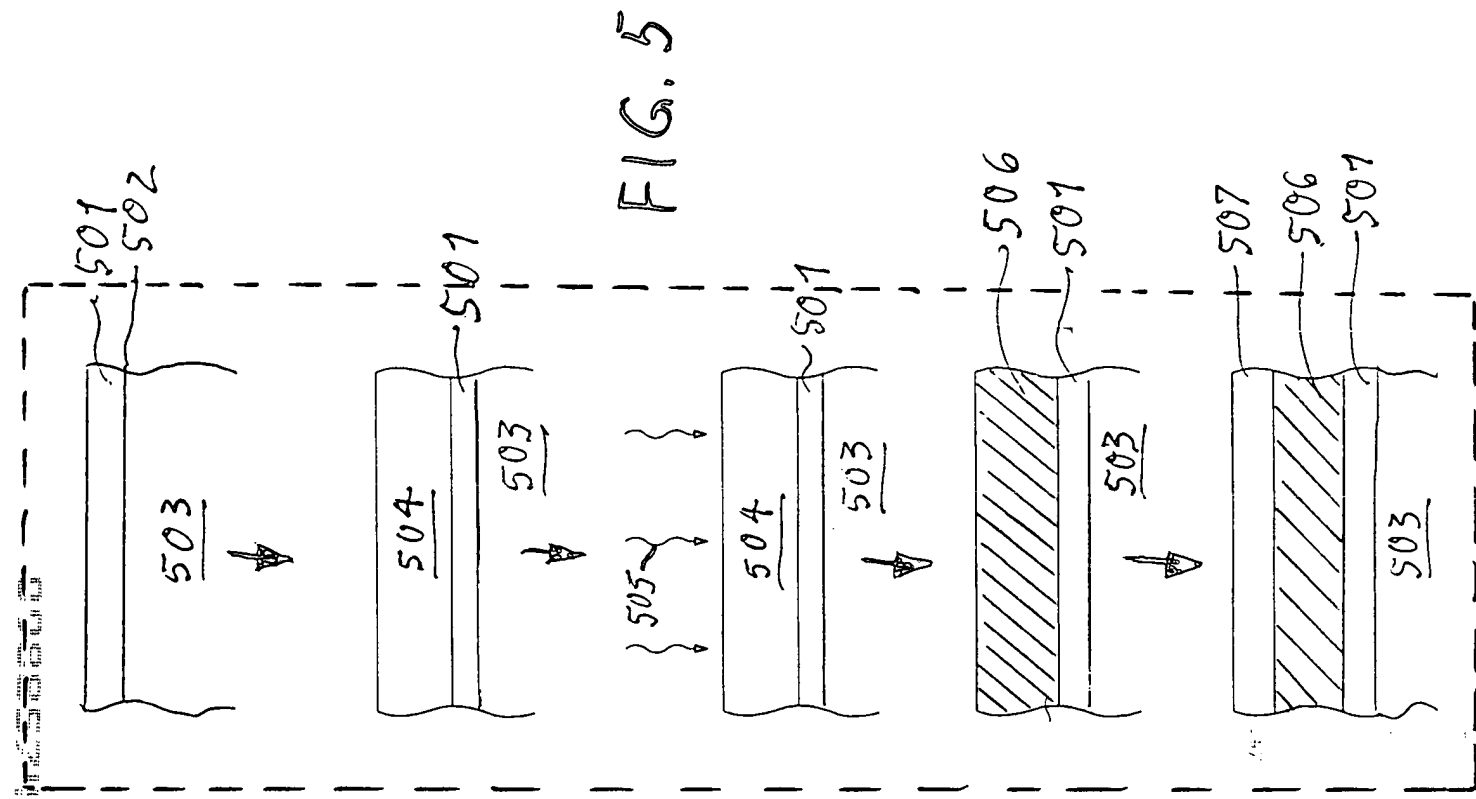


FIG. 5

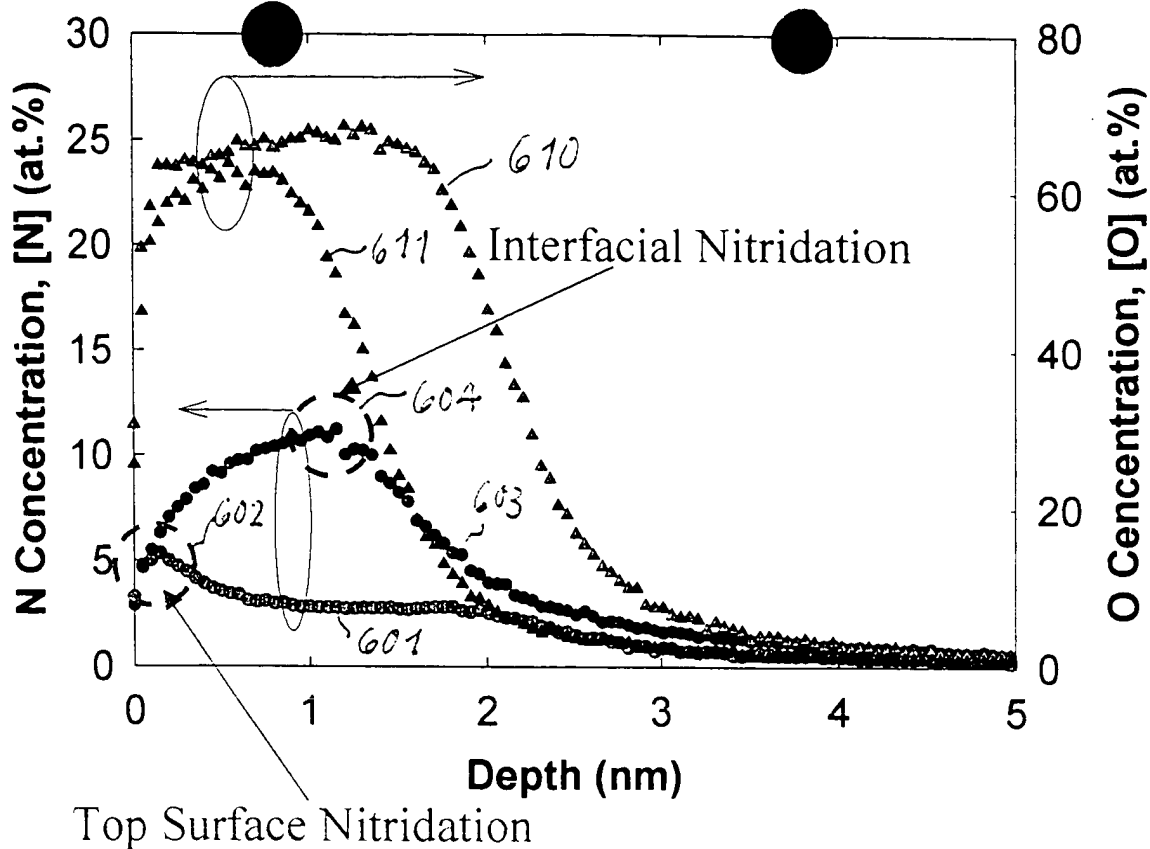


FIG. 6

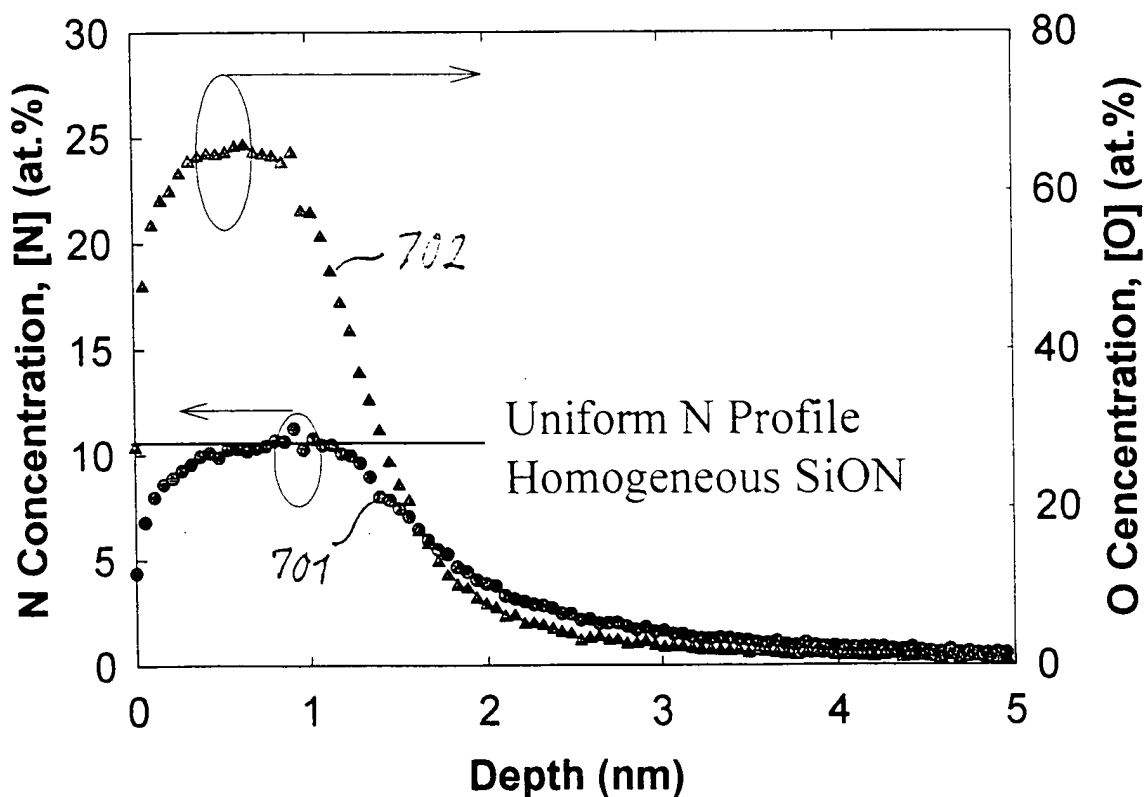


FIG. 7

Temperature:

$\text{temp}_1 = 600\text{-}1000^\circ\text{C}$

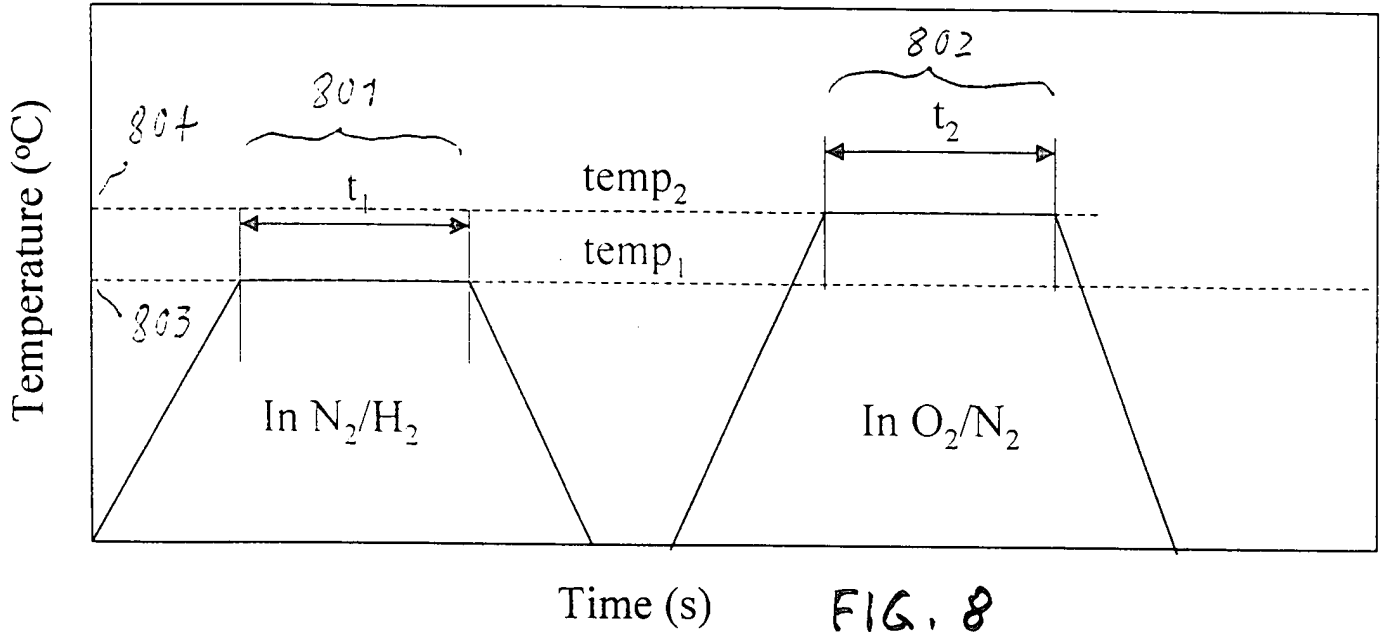
$\text{temp}_2 = 800\text{-}1000^\circ\text{C}$

Time:

$t_1 = 5\text{-}60\text{s}$

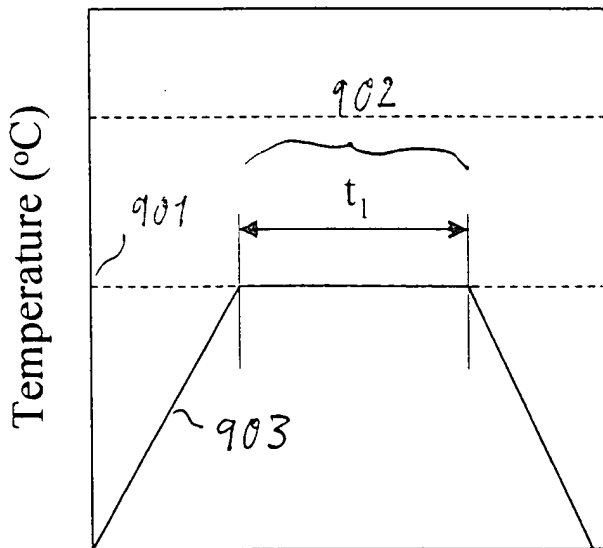
$t_2 = 5\text{-}60\text{s}$

Rapid Thermal Process

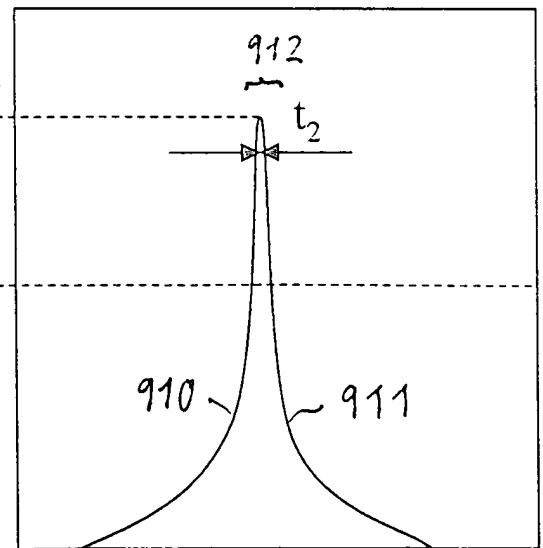


Temperature: $\text{temp}_2 > \text{temp}_1$, $t_2 > t_1$
Time: $t_2 \ll t_1$

Conventional Rapid Thermal Process



"Spike" Process



Temperature: $T_1 = \text{temp}_1 = 600-1000^\circ\text{C}$
 Time: $t_1 = 5-60\text{s}$

Rapid Thermal Process

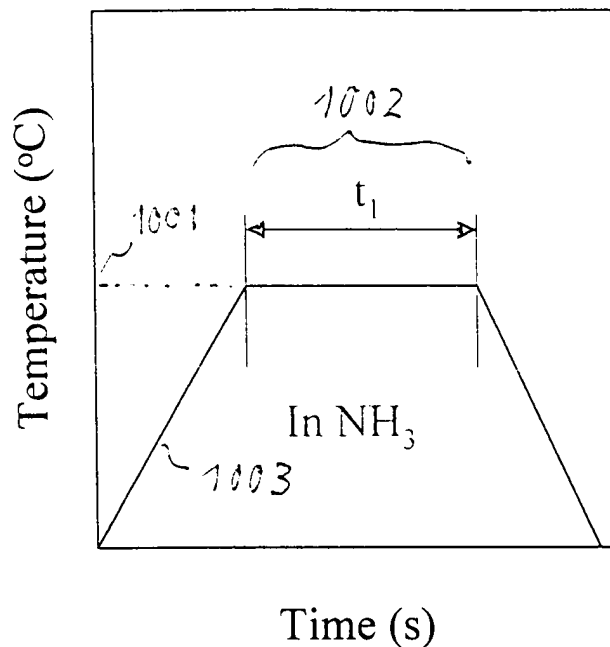


FIG. 10

Temperature: $T_1 = \text{temp}_1 = 800-1050^\circ\text{C}$
 Time: $t_1 = 5-60\text{s}$

Rapid Thermal Process

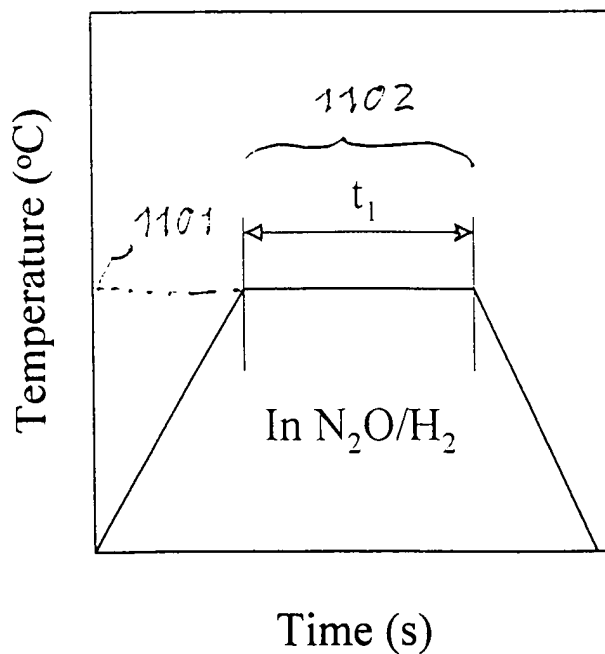


FIG. 11